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Visualizing Sentiments in Business-Customer Relations with Metaphors

Exploring how visualization of sentiments, extracted from social media posts, can foster transparency and strengthen relations between businesses and its customers.
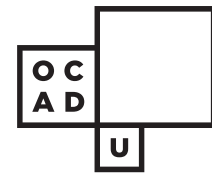
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Challenge

How can we leverage user-generated online posts as a means to foster transparency and strengthen relations between businesses and its customers, through sentiment analysis and visualization?

Rationales

• **Social transparency**: disclose background processes in a transparent manner
• **Sentiment as judgment indicator**: help users make decisions based on sentiments and opinions
• **Monitoring**: track changes in sentiments or topics
• **Metaphors**: use common contextual metaphors as familiar communication tools
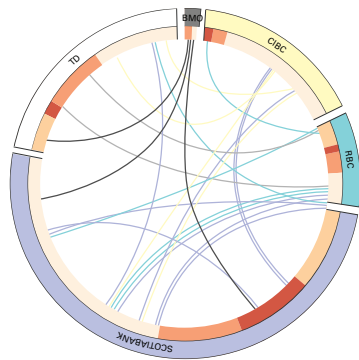
SentiWheel

Inspired by pie charts, SentiWheel presents a holistic view of the financial market as banks share the same large pool of users.

BANKS   BMO CIBC RBC SB TD

SENTIMENTS   POS MIX NEG NEU
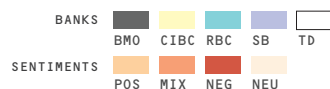
The wheel is divided among five banks and further subdivided by their respective volume of sentiments.

MAY 22   MAY 26   MAY 31
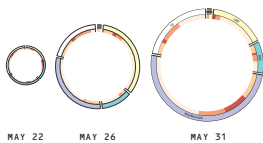
This timepiece visualization takes the user through daily snapshots of the volume and sentiment of online posts. The size of the wheel dynamically adjusts to the amount of posts.
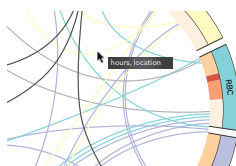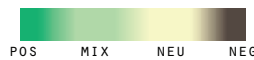
Lines connect banks and sentiments based on keyword matches. For instance, 'hours and location' could be a positive for RBC but neutral in others.
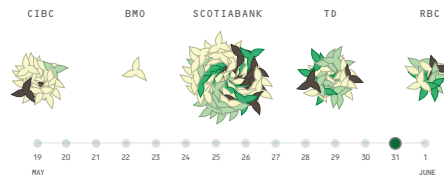
Money Trees

This tongue-in-cheek visualization allows users to monitor how banks cultivate their customers.

POS   MIX   NEU   NEG

Each bank is embodied by a tree, with leaves ranging from lively green (positive) to brown murky tones (negative). Tree size is changes based on the amount of online discussion referencing each bank. Hence, each bank's goal is to cultivate a big, green tree.

CIBC   BMO   SCOTIABANK   TD   RBC

MAY 22

MAY 26

MAY 31
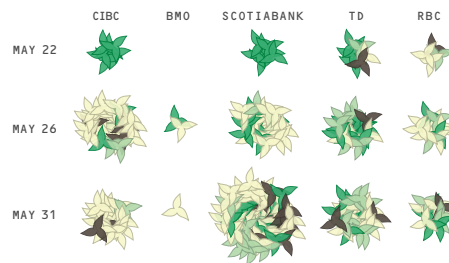
When running in real time, the trees will appear to be alive as leaves appear and disappear as data is crawled online. Banks can use this as a monitoring tool to track trends and sentiments while users can use it to compare banks and rectify or praise bank performance.
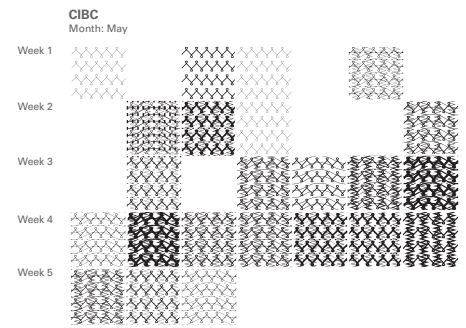
Emotional Tapestry

This visualization strives to show the complexity of human emotions by layering sentiments on top of one another. A grid composed of a square per day provides an overview of the wealth and variety of sentiments in online posts.

POSITIVE   NEGATIVE   NEUTRAL   MIXED
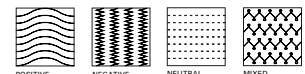
Each sentiment is represented by a pattern that becomes more prominent as the sentiment increases online. As the tapestry fills, users can spot problems when squares or grids begin to look unsightly or alarming.

SCOTIA BANK   CIBC   RBC   BMO   TD

MAY 22

MAY 26

MAY 31
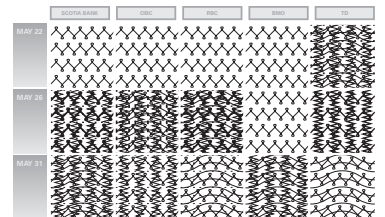
The tapestry shows a wider historical overview of sentiments as opposed to temporal snapshots of daily posts.
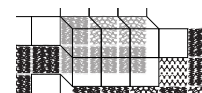
Overlapping tapestries builds an aggregated view of overall opinions. The tapestry is versatile enough that each square can also represent keyword as opposed to days.